

[CLAIMS]

[Claim 1] A dishwasher comprising:

a sump housing for holding washing water;

a heater assembly fastened to an inside of the sump housing for heating the washing water; and

a pump fastened to the sump housing for pumping washing water heated by the heater assembly.

[Claim 2] The dishwasher as claimed in claim 1, wherein the pump pumps the washing water from above the heater assembly.

[Claim 3] The dishwasher as claimed in claim 2, wherein the pump includes;

an impeller in the sump housing for pumping the washing water from above the heater assembly,

a motor under the sump housing, and

a shaft passed through a bottom of the sump housing for transmission of driving force from the motor to the impeller.

[Claim 4] The dishwasher as claimed in claim 3, further comprising a disposer rotatably mounted in the sump housing between the impeller and the bottom of the sump housing for

smashing soil contained in the washing water.

[Claim 5] The dishwasher as claimed in claim 4, wherein the impeller and the disposer are driven by the same motor.

[Claim 6] The dishwasher as claimed in claim 1, wherein the heater assembly is detachable from the sump housing from an outside of the sump housing.

[Claim 7] The dishwasher as claimed in claim 6, wherein the heater assembly is provided to a bottom of the sump housing.

[Claim 8] The dishwasher as claimed in claim 7, wherein the sump housing has an opening in a side for pass through of the heater assembly.

[Claim 9] The dishwasher as claimed in claim 8, wherein the heater assembly is designed not to interfere with components in the sump housing when the heater assembly is inserted into the sump housing or drawn out of the sump housing through the opening.

[Claim 10] The dishwasher as claimed in claim 9, wherein the heater assembly is designed not to interfere with the disposer when the heater assembly is separated from the sump

housing.

[Claim 11] The dishwasher as claimed in claim 10, wherein the heater assembly includes;

a heater passed through the opening for heating the washing water, and

a packing inserted in the opening for sealing the opening, and the heater passing therethrough.

[Claim 12] The dishwasher as claimed in claim 11, wherein the heater assembly further includes a clamp fastened to the sump housing for holding the heater.

[Claim 13] The dishwasher as claimed in claim 11, wherein the heater assembly includes a pressing mechanism for pressing down to deform the packing, to seal the opening completely.

[Claim 14] The dishwasher as claimed in claim 6, wherein the pump pumps the washing water from above the heat assembly.

[Claim 15] The dishwasher as claimed in claim 14, wherein the pump includes;
an impeller in the sump housing for pumping the washing water from above the heater assembly,

a motor under the sump housing, and

a shaft passed through a bottom of the sump housing for transmission of driving force from the motor to the impeller.

[Claim 16] The dishwasher as claimed in claim 15, further comprising a disposer rotatably mounted in the sump housing between the impeller and the bottom of the sump housing for smashing soil contained in the washing water.

[Claim 17] A dishwasher comprising:

a tub for placing dishes therein;

a sump housing for holding washing water;

a heater assembly fastened to an inside of the sump housing for heating the washing water;

a pump fastened to the sump housing for pumping washing water heated by the heater assembly; and

at least one spray nozzle.

[Claim 18] The dishwasher as claimed in claim 17, wherein the heater assembly is detachable from the sump housing from an outside of the sump housing.

[Claim 19] The dishwasher as claimed in claim 17, wherein the pump includes a pump for pumping the washing water heated by the heater assembly from above the heater assembly.

[Claim 20] The dishwasher as claimed in claim 19, wherein the heater assembly is detachable from the sump housing from an outside of the sump housing.